
HCV Two Year Forecasting Tool

User Guidance v8.7

U.S. Department of Housing and
Urban Development

Introduction

HUD has developed a spreadsheet tool for use by PHA and HUD staff to assist in projecting HCV leasing, spending and funding over a two year period. The purpose is to facilitate decision making by PHAs and to guide HUD oversight and technical assistance so that PHAs can achieve optimal use of the HCV funds while stabilizing the program. The goal is to make full use of the program while avoiding the typical large cyclical swings of lease up followed by attrition, and to eliminate abrupt cutbacks that might adversely impact participants.

Accomplishing this requires planning across calendar years since spending patterns in one year impact funding in the next, and the ending point of one year must be sustainable as the beginning point in the next year. Often, the goal of achieving a high average leasing for the year can result in high leasing at year end to compensate for lower leasing at the beginning of the year. This can result in the beginning lease point of the next year being too high to enable the program to be leased within that next year's leasing limits. Or require no leasing, only attrition to get average leasing back down, which starts the cycle all over again with low beginning leasing in year three.

In addition, projections of leasing and spending require consideration of four key interacting variables:

- **Success Rate** – The percentage of vouchers issuances that result in a lease
- **Turnover Rate** – The annual rate of participants leaving the program
- **Issuance to Leasing Time** – The percentage of vouchers leased that are leased within standard time frames, i.e. 30, 60, 90 days etc., or as measured by average months from issuance to lease.
- **Per Unit Cost** – the Monthly HAP expenses divided by the number of leased units

The spreadsheet tool allows the user to factor in all these variables, and to estimate the subsequent year funding resulting from projected patterns of leasing and spending. With the ability to factor in these considerations, the user can test voucher issuance scenarios and the resulting leasing and spending over the two year period. This facilitate more deliberate program management including considerations of trade-offs inherent in this process.

The accuracy of the projections of the spreadsheet is only as good as the accuracy of the variables entered in to the spreadsheet. It is absolutely critical that PHAs carefully track success rate, turnover rate, time from issuance to lease and per unit cost. To the degree this data is volatile and therefore the predictive value less reliable, the user should take great caution and a leave larger margin for error. Even when carefully tracked, there are no guarantees that historic data will be born out in the future. Monthly validation of the variables is important.

Subsequent year estimates of funding are simply the application of appropriations (or anticipated appropriations) methodology. Actual funding will be based on actual dollars appropriated which may be more or less than the results of the re-benchmarking methodology applied nationally. A downward proration, for example, might be applied. The spreadsheet provides the user with the option to use whatever proration deemed prudent. This is an important decision point and one virtue of the tool is that multiple proration scenarios can be tested and the user can assess risk, gauging the range of outcomes from the differing funding possibilities. ***HUD makes no representation that the estimates derived from the spreadsheet will actually be realized as funding.***

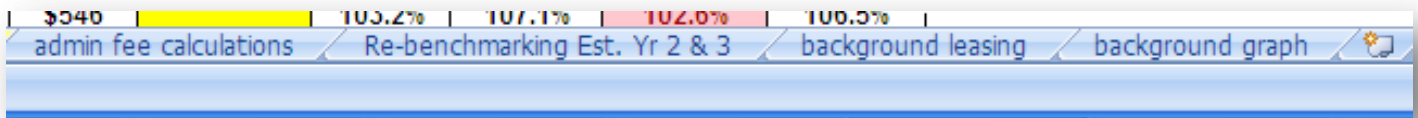
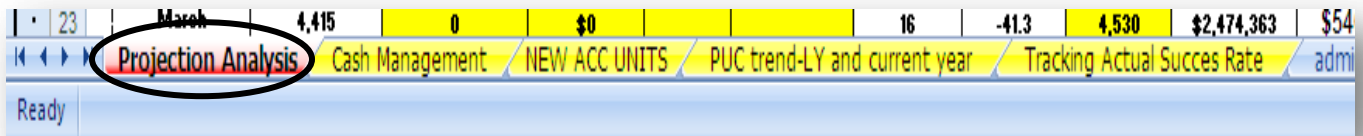
Version 8.7 includes the following changes:

- Removes the options to select from FFY or CY rebenchmarking period. The spreadsheet now defaults to CY re-benchmarking. The CY standard adopted in the 2011 appropriations seems to be the method going forward.
- Removes option for Set –Aside funding for year-end higher leasing. This was dropped in the 2011 appropriations methodology and seems unlikely to be adopted again.
- Removes input cells for October, November and December of the prior year, since they were needed only to calculate the FFY re-benchmarking period which is expected to no longer be used.
- NRA Offset - In the current funding year, the user will now input what amount if any has been identified in the renewal letter from HUD as an NRA Offset. Essentially HUD identifies what portion of the NRA (HAP Reserve) is “excess” and useable in lieu of new budget authority (line 18 of the Renewal letter Enclosure A).
- Additional months have been added to the Success Rate tab, as has been requested by some users.
- A Cash Management tab has been added to be used at the discretion of the user to compare actual and projected expenditures to actual and planned cash disbursements from HUD.
- Administrative Fees have been updated with 2012 fee data for admin fee earning projection purposes.

In addition to projecting leasing, spending and funding, there is a projection of administrative fees. There is also a spreadsheet tab where users can maintain data to track success rate and time from issuance to lease, and another tab to facilitate analysis of per unit cost trends, to better inform projections.

The last page of this guide is a concise step by step set of instructions for data entry.

Excel Workbook Organization



This is an Excel Workbook made of several related spreadsheets as shown on the tabs displayed above. The main work is done on the **“Projection Analysis Spreadsheet”** tab. Other tabs are:

- **“Cash Management”** – An optional tab that assist the PHa to compare actual and projected expenditures to Actual and projected HUD disbursements
- **“New ACC Units”** - Enter new ACC units awarded in the current and 2nd year to automatically calculate funding spanning two years and special re-benchmarking method for new units.
- **“Tracking Actual Success Rate”** - An optional tab with a spreadsheet that allows the user to enter actual issuances by month and actual leasing from those issuances by month, and will calculate actual success rate and actual time from issuance to lease.
- **“PUC Trend- LY and Current Year”** – An optional tab that allows the user to input previous year leasing and HAP data to depict analysis of PUC trends using last year through the current month.
- **“Admin Fee”** - Displays the admin fee calculations and the listing of Col A and B rates for all PHAs;
- **“Re-Benchmarking Estimate Yr 2 and 3”** - Displays the calculations involved in coming to the ABA estimates for Years two and three based on CY months spending within UMA limits;
- **“Background Leasing”** – Displays the background activity incorporating issuances, attrition and leasing from issuances.
- **“Background Graph”** - Displays all the supporting data used in the graphs and a copy of the graphs,

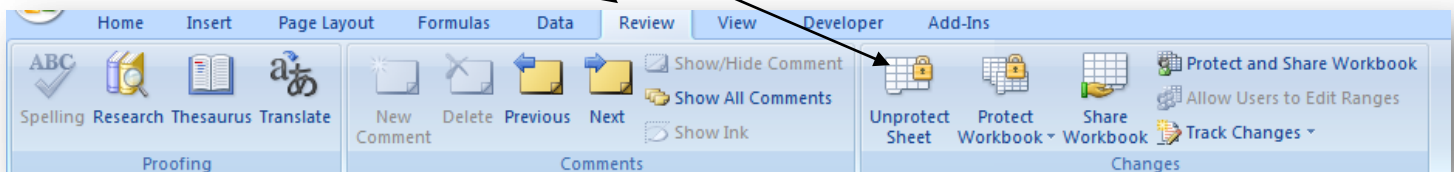
Two Year Forecast- Spreadsheet Basics

3

- Data entry in Yellow Cells: for HAP and Leased units cell color changes once entered
- Comment Flags for key columns – just put cursor over red corner of cell
- All other cells protected

ACTUAL Leased Units	Actual HAP	Vouchers red, or projected to be issued	PI addi reduc leas
473	\$129,139	6	
468	\$128,693	8	
464	\$130,456	2	
459	\$131,111	20	
458	\$131,145	2	
454	\$132,352	13	
452	\$133,986	14	

The spreadsheets in the workbook are protected allowing changes only to the data entry cells which are shaded yellow. Comment flags offer instruction and guidance for key columns or cells. If for some reason the user needs to unprotect the spreadsheet to make an adjustment, this can be done by selecting the “Review” menu choice and clicking on “Unprotect”.



PHA Name	LORAIN MHA	PHA Number	OH012												
ACC and Funding Information															
	Current Year	Year 2	Year 3												
Calendar Year	2012	2013	2014												
Beginning ACC # Vouchers	2,947	2,947	2947												
Initial BA funding	\$17,045,677	\$17,616,666	\$17,822,670												
OFFSET of HAP Reserve (NRA)	\$0	\$0	\$0												
Set Aside Funding	\$301,045														
New ACC Units Funding	\$	\$0	\$0												
Total ABA Funding Provided	\$17,346,722	\$17,616,666	\$17,822,670												
<div>Funding Pro-Ratio Levels: Yr 2 and 3</div> <div>Yr 2 & 3 Re-Benchmarking Pro-ratio: 99.0%</div> <div>Yr 2 Set Aside Proration: 90.0%</div> <div>Admin Fee Proration: 75.0%</div> <div>Optional NRA OFFSET YR2 and 3 variable: 0.0%</div> <div>Prorated Funding Eligibility Level (including Offset): \$17,346,722</div> <div>Average Monthly Funding Eligibility: \$1,445,560</div>															
<div>Program Projection Variables</div> <div>Success Rate: 70%</div> <div>Annual Turnover rate: 10.0%</div> <div>Time from Issuance to HAP eff Date</div> <div>% Leased in 30 days: 18%</div> <div>% leased in 30 to 60 days: 40%</div> <div>% Leased in 60 to 90 days: 38%</div> <div>% Leased in 90 to 120 days: 4%</div> <div>% Leased in 120 to 150 days: 0%</div>															
<div>Leasing and Spending Outcomes: Current and Following Year Projections</div> <div>Current Year End Projection: UML % of ACC (UEA): 98.5%</div> <div>Following Year End Projection: HAP Exp as % All Funds (ABA + NRA): 93.0%</div> <div>HAP Exp as % of Eligibility only: 102.6%</div> <div>Projected Yr End HAP Reserve (NRA): \$1,338,208</div> <div>NRA as % of ABA: 7.9%</div> <div>Potential Terminations: 0</div>															
<div>Beginning CY HAP Reserve (NRA): \$1,786,098</div> <div>Total Funding Available: ABA + NRA: \$19,132,820</div> <div>Eligibility per ACC unit month: \$490.52</div> <div>Beginning Year Three: Monthly ABA minus HAP Exp: (\$15,352)</div> <div># Months NRA will cover Yr 3 Monthly deficit: 62</div> <div>CoLA - first 600 units: \$64.33</div> <div>Col. B: \$68.83</div> <div>Projected Admin Fees: \$1,591,382</div>															
<div>DISCLAIMER:</div> <div>Year Two and Three Re-Benchmarking Funding projections are only tentative estimates using assumptions described in the guidance, and user selected variables.</div> <div>User choices include selecting prorations and an NRA offset.</div>															
<div>CoLA - first 600 units: \$64.33</div> <div>Col. B: \$68.83</div> <div>Projected Admin Fees: \$1,591,382</div> <div>Monthly ABA Expended %: 98.5%</div> <div>Monthly UML %: 98.0%</div> <div>Monthly ABA Expended %: 101.5%</div>															
2012	ACC Units (UMAs) (enter only if change)	ACTUAL Leased Units	Actual HAP	Vouchers issued, or projected to be issued	Other Planned additions or reductions to leased units	New Leasing from Issued Vouchers	Estimated Attrition	Leased units: actual and Projected	HAP Expense: Actual and Projected	PUC Actual or Projected	Manual PUC Override	Cumulative Annual Leased %	Cumulative Eligibility Expended %	Monthly UML %	Monthly ABA Expended %
January	2,947	2,889	\$1,467,233			0	-24.0	2,889	\$1,467,233	\$508		98.0%	101.5%	98.0%	101.5%
February	2,947	0	\$0	45		0	-24.0	2,865	\$1,455,053	\$508		97.6%	101.1%	97.2%	100.7%
March	2,947	0	\$0	80		6	-23.8	2,847	\$1,445,854	\$508		97.3%	100.7%	96.6%	100.0%
April	2,947	0	\$0	80		23	-23.6	2,846	\$1,445,370	\$508		97.1%	100.5%	96.6%	100.0%
May	2,947	0	\$0	30	10	44	-23.6	2,877	\$1,461,026	\$508		97.2%	100.6%	97.6%	101.1%
June	2,947	0	\$0	30	20	49	-23.9	2,922	\$1,498,789	\$513	\$513	97.5%	101.2%	99.1%	103.7%
July	2,947	0	\$0	30		36	-24.3	2,933	\$1,504,662	\$513		97.8%	101.6%	99.5%	104.1%
August	2,947	0	\$0	30		22	-24.3	2,931	\$1,503,663	\$513		98.0%	101.9%	99.5%	104.0%
September	2,947	0	\$0	30		21	-24.3	2,928	\$1,501,953	\$513		98.2%	102.1%	99.3%	103.9%
October	2,947	0	\$0	30	10	21	-24.3	2,934	\$1,505,388	\$513		98.3%	102.3%	99.6%	104.1%
November	2,947	0	\$0	30		21	-24.4	2,931	\$1,503,665	\$513		98.4%	102.6%	99.6%	104.0%
December	2,947	0	\$0	45		21	-24.3	2,928	\$1,501,956	\$513		98.5%	102.6%	99.3%	103.9%
total	35,364	2,889	\$1,467,233	460	40	264	-288.8	34,831	\$17,794,612			98.5%	102.6%		
2013															
January	2,947			20		23	-24.3	2,926	\$1,501,230	\$513		99.3%	102.3%	99.3%	102.3%
February	2,947			20		24	-24.3	2,926	\$1,501,049	\$513		99.3%	102.3%	99.3%	102.2%
March	2,947			30		21	-24.3	2,923	\$1,499,326	\$513		99.3%	102.2%		

The screen print above is a quick look at the first page of the spreadsheet to orient the user to the general locations. There are four key sections across the top which will be spelled out in separate slides:

- ACC and Funding Information;
- Proration and Admin Fee Information;
- Program Projection Variables; and
- Leasing and Spending Outcomes

Section One of Projection Analysis Spreadsheet

Section one – top Left of the Projection Analysis spreadsheet, begins with entering the **PHA five digit number**. This will result in the name being populated and applicable administrative fee rates being selected. Entering the **Year** will result in the 2nd and 3rd year column headings being populated here and on all other tabs.

PHA Name	HAMILTON COUNTY PUBLIC HSG	PHA Number	oh048
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ACC and Funding Information			
	Current Year	Year 2	Year 3
Calendar Year	2012	2013	2014
Beginning ACC # Vouchers	2,947	2,947	2967
Initial BA funding	\$17,045,677	\$17,677,360	\$17,853,314
OFFSET of HAP Reserve (NRA)	\$301,234	\$0	\$0
Set Aside Funding	\$47,888		
New ACC Units Funding	\$ 102,042	\$246,037	\$51,589
Total ABA Funding Provided	\$17,195,607	\$17,923,396	\$17,904,903
Beginning CY HAP Reserve (NRA)	\$1,786,098	\$1,187,092	\$1,107,792
Total Funding Available: ABA + NRA	\$18,981,705	\$19,110,488	\$19,012,695
Eligibility per ACC unit month	\$494.76	\$506.83	\$506.30

ACC and funding information includes data entry for the current year ACC units and funding from Enclosure A (line 19) of the HUD funding renewal letter. Also add any carryover from prior year new allocations. For Years Two and Three – the calculated re-benchmarked ABA and beginning NRA is displayed.

Offset of HAP reserve (NRA) is entered if an offset in the current year is made per the renewal funding letter, Enclosure A line 18.

New ACC Units allocated during the current year are entered in the New ACC Units tab and are used in the Projection Analysis tab – allocating the subsidy to the correct years and modifying the re-benchmarking of Year Two and Three ABA using the Allowance for Leasing afforded to new allocations.

ABA/ eligibility per ACC Unit Month is the last item in this section. It is the total ABA divided by UMAs – spreading the ABA across all ACC units per month. If the ABA per ACC Unit Month is less than the actual PUC, the user can see the extent to which the funding will not support all ACC units, without the use of NRA.

Funding Pro-Ration Levels	
Yr 2 & 3 Re-Benchmarking Pro-ration	98.0%
Yr 2 Set Aside Proration	50.0%
Admin Fee Proration	79.9%
Optional NRA OFFSET variable	

The Funding Proration Section has separate entries for: YR 2 and 3 Re-benchmarking, Yearend leasing set-aside, and for administrative fees.

The user-entered re-benchmarking proration is important because it should reflect the user's best estimate of how fully future appropriations will fund the formula rebenchmarking estimate. This allows the user to exercise judgment about likely funding outcomes, and to contrast the funding levels associated with testing different proration levels. An inflation factor is not used in the funding estimate. This acts as an implicit margin for projection error. The user can incorporate it through use of the proration variable, by prorating up by the desired inflation amount.

This section also includes an **Optional NRA Offset Cell** to permit the user to model the use of an offset to NRA which uses a select amount of NRA in lieu of new ABA calculated from the re-benchmarking process. Here a percent is entered that is the percent of ABA that will be used to set the maximum allowable NRA, above which, the actual NRA will be used to offset budget authority that would otherwise be funded per the funding formula. This is applied to Year 2 and 3, when entered by the user.

Central top Section of Spreadsheet

- Enter Success Rate
- Enter % of leased vouchers that reach HAP contract within 30, 60, 90, 120 days of Issuance.
 - Must add to 100%
- Enter Annual Turnover rate – number participants leasing as a percent of all leased units.

Program Projection Variables			
Success Rate	40%	Annual Turnover rate	17.0%
Time from Issuance to HAP eff Date			
% Leased in 30 days	55%	Average months from issuance to HAP EFF DATE	1.55
% leased in 30 to 60 days	35%		
% Leased in 60 to 90 days	10%	Cells to the left add to 100%	
% Leased in 90 to 120 days		cells add to >>>>	100%
% Leased in 120 to 150 days			

Converts %'s leased in time categories to an average # of months from issuance to leased

Keeps running total for user to assure percentages add to 100%

This is the input section for critical program variables:

- **Success rate** of issuances becoming units under contract;
- **Annual turnover rate** – The number of participants leaving the program annually as a percent of the units under lease;

- **Time from issuance to HAP effective Date** - This is the percentage of units leased that are leased within 30, 60, 90 and 120 days. These percentages should add to 100%, and there is a cell adding them up that is shaded red until they reach 100% and also a few cells above it converts this information into a different measure of the same factor – the average months from issuance to lease. This information can be informed by use of the Success Rate Tracking tab if used.

Prorated Funding Eligibility Level (including Offset)	
\$17,496,841	
Average Monthly Funding Eligibility	\$1,458,070

The Prorated Funding Eligibility box shows the prorated funding eligibility level including, when there is an Offset, the amount of the offset of excess HAP reserve. This is the amount the PHA was entitled to had there not been excess NRA which was used in lieu of new subsidy. It is the number used to calculate spending as a percent of eligibility.

The Leasing and Spending Outcomes section is the main dashboard – showing the resulting:

Leasing and Spending Outcomes: Current and Following Year Projections		
Current Year End Projection		Following Year End Projection
UML % of ACC (UMA)	98.5%	98.1%
HAP Exp as % All Funds (ABA + NRA)	93.7%	94.2%
HAP Exp as % of Eligibility only	101.7%	100.4%
Projected Yr End HAP Reserve (NRA)	\$1,187,092	\$1,107,792
NRA as % of ABA	7.0%	6.3%
Potential Terminations	0	0

- % UMLs/UMA,
- % Spending/All Funds,
- % Spending /ABA,
- Ending Year NRA,
- **NRA as a % of ABA** as metric for gauging the size of the NRA
- **Potential Terminations** shows the potential participants impacted if a PHA spends beyond their means and funds funding does not support spending

- **Beginning Year Three: Monthly Exp vs. ABA** - This line quickly assesses monthly spending entering into Year Three compared to ABA on a monthly basis, by showing the Year Three estimated ABA divided

Beginning Year		
Three: Monthly ABA minus HAP Exp	(\$29,760)	29 # Months NRA will cover Yr 3 Monthly deficit

by 12 min us the Dec
 ember Year Two Hap. If this is a deficit – it calculates how many months that deficit can be funded from the Year Two ending NRA. If Dec HAP is less than monthly year three ABA it shows “surplus”.

The expectation is that the user consults this dashboard section at least monthly, assessing the results from adding an additional month’s actual data, re-validated key variables and potential PUC changes, and then experiments with different issuance scenarios and their resulting Year One and Two results until a preferred scenario is adopted, until it is revisited in the next assessment .

Two Year Forecast — current year monthly left half

9	Input cells. “Other Planned additions or reductions “ E.G. Adds thru absorbing ports, Reductions from Receiving PHA absorbing reducing units , etc.					Results from Attrition and new leasing from issuance. Net actual and projected units leased		
Month	ACC Units (UMAs) (enter only if change)	ACTUAL Leased Units	Actual HAP	Vouchers issued, or projected to be issued	Other Planned additions or reductions to leased units	New Leasing from Issued Vouchers	Estimated Attrition	Leased units: actual and Projected
January	484	473	\$129,139	6		0	-7	473
February	484	468	\$128,693	8		1	-7	468
March	484	464	\$130,456	2		3	-7	464
April	484	459	\$131,111	20		2	-7	459
May	484	458	\$131,145	2		5	-7	458
June	484	454	\$132,352	13		3	-6	454
July	484	452	\$133,986	14		4	-6	452
August	484					5	-6	450
September	484					2	-6	447
October	484					1	-6	441
November	484					0	-6	435
December	484					0	-6	428
total	5,808	3,228	916,882	65	0	26	-78	5428

This is the left hand side of the Year One monthly spreadsheet section which contains mostly input cells:

- **ACC units** automatically default to the ACC number set in the PHA information and Funding section in the upper top left section of the spreadsheet unless additional units are allocated to the PHA, in which case they should be entered into the New ACC Units Tab. The ACC units in the Projection Analysis Tab will be populated in the correct month from that source.
- **Actual Leased** units are entered, the cells turn from yellow to white
- **Actual HAP Spending** is entered, the cells turn from yellow to white.
- **Vouchers Issued or Planned to be Issued** are entered,
- **Other Planned Additions or Deletions** are entered. These would be changes coming from other than issuances. Additions would, for example, be ports absorbed by the PHA, or Project Based Voucher units leased. Reductions in units leased and paid for by the PHA are entered as a negative number and could be: ports absorbed by the receiving PHA that had been billed or any other planned reductions other than attrition.

The remaining columns display:

- **New Leasing from Issued Vouchers-** This is the result of calculations displayed in the “Background Leasing” tab that apply the success rate and time from issuance to lease variables.
- **Estimated Attrition** shows the monthly impact of the Turn Over rate variable applied to the previous month’s units leased.
- **Leased Units: Actual and Projected** shows either the actual entered for the month or the projection for future months, with the projections shaded in blue.

Two Year Forecast — current year monthly data

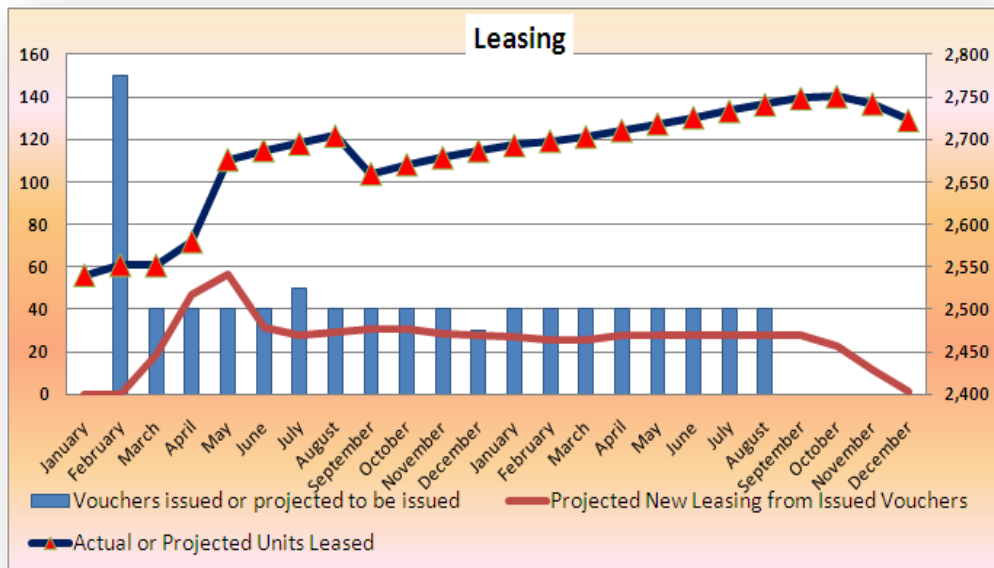
right half of spreadsheet

10						
Allows user to project using different PUC from that month forward						
HAP Expense: Actual and Projected	PUC Actual or Projected	Manual PUC Override	Cumulative Annual Leased %	Cumulative ABA Expended %	Monthly UML %	Monthly ABA Expended %
\$129,139	\$273		97.8%	96.6%	97.8%	96.6%
\$128,693	\$275		97.2%	96.5%	96.7%	96.3%
\$130,456	\$281		96.7%	96.9%	95.8%	97.6%
\$131,111	\$286		96.3%	97.2%	94.8%	98.1%
\$131,145	\$287		95.9%	97.4%	94.5%	98.1%
\$132,352	\$291		95.6%	97.6%	93.9%	99.0%
\$133,986	\$297		95.3%	98.0%	93.4%	100.3%
\$133,565	\$297		95.0%	98.3%	93.1%	99.9%
\$132,408	\$297		94.7%	98.3%	92.3%	99.1%
\$130,698	\$297		94.3%	98.3%	91.1%	97.8%
\$128,846	\$297		93.9%	98.1%	89.8%	96.4%
\$127,021	\$297		93.5%	97.9%	88.5%	95.1%
\$1,569,420			93.5%	97.9%		

This is the right half of the current year monthly data section.

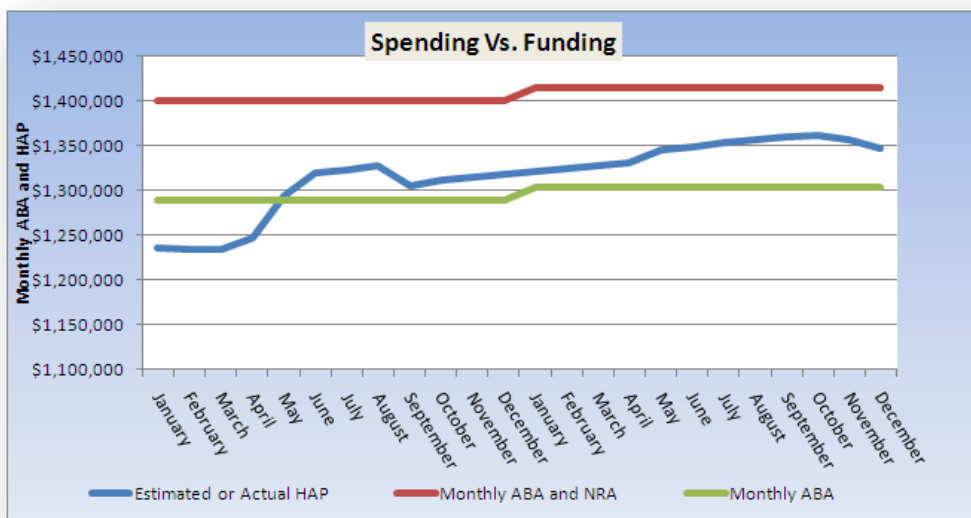
- **HAP Expenses Actual or Projected** shows either the actual entered for the month or a projection using the projected leased units multiplied by the previous month's Per unit Cost.
- **PUC Actual and or Projected** is the actual cost per unit for months with actual data entered or projects based on the last month actual – unless the user chooses to override that by entering a different PUC .
- **Manual PUC Override** allows the user to alter the projection with different Per Unit Cost levels. This can reflect trends being continued forward or planned changes that will impact the PUC up or down. The new amount will be carried forward in the cost estimating until changed further. Otherwise the spreadsheet defaults to projecting based on the most current actual PUC.
- **Cumulative Annual Leased Percentage** displays the year to date actual and projected UMLS divided by the UMAs
- **Cumulated ABA Expended** displays the year to date actual and projected HAP expenditures divided by the Annual Budget Authority
- **Monthly UML % and Monthly ABA Expended %** show the percentages for that month only. This is particularly useful to examine where the PHA is at year end – monthly as opposed to cumulatively, because this represents the starting point in the next year. For example, while a PHA may reach 98% cumulative leasing percentage, they end the year at 105%, a level that will not allow them to end the subsequent year within the UMA limit.

Leasing Graph



The graph uses two Y axes, the left one measuring Vouchers Issued (blue) and resulting new leasing (red), and the right Y axis measuring total actual and projected leasing in dark blue with triangles. Ideally, the calibration of issuances over a two year period will allow the user to minimize the “rollercoaster” effect and come to a stable and sustainable level of leasing in Year 2.

Spending Vs. Funding Graph



This graph displays actual and projected HAP spending (blue) alongside the monthly ABA (green) and all funds: Monthly ABA + Monthly NRA (red). For this graph the tab background graph contains the data which can be viewed. Here the Annual Budget Authority and the NRA are divided into monthly amounts to permit the display of monthly spending against resources evenly divided by month.

Lastly, at the bottom of the Projection Analysis Tab is a Comment section where notes can be added.

Comments

Other Tabs: Cash Management

23	March	4,415	0	\$0		1
Projection Analysis	Cash Management	NEW ACC UNITS	PUC trend-LY and curre			
Ready						

Cash Management					
2012	Funds on Hand at PHA at End of Prior Month (HAP related - not administrative funds)	Plus: HUD Actual or Planned HAP Related Disbursements	HAP Expense: Actual and Projected from Projection tab	Disbursements minus Expenditures	Estimated End of Month Balance: Funds on Hand + Planned Disbursement Minus Projected Expenditures
	A	B	C	(B-C)	(A+B)-C
January	\$1,786,098	\$1,429,444	\$1,467,233	-\$37,789	\$1,748,309
February	\$1,748,002	\$1,429,444	\$1,455,053	-\$25,609	\$1,722,393
March	\$1,721,876	\$1,429,444	\$1,445,854	-\$16,410	\$1,705,466
April	\$1,705,466	\$1,431,098	\$1,445,370	-\$14,272	\$1,691,194
May	\$1,691,194	\$1,431,098	\$1,461,026	-\$29,928	\$1,661,266
June	\$1,661,266	\$1,431,098	\$1,498,789	-\$67,691	\$1,593,575
July	\$1,594,122	\$0	\$1,504,662	-\$1,504,662	\$89,460
August	\$89,460	\$1,455,053	\$1,503,663	-\$48,609	\$40,851
September	\$41,987	\$1,445,854	\$1,501,953	-\$56,099	-\$14,112
October			\$1,505,388	-\$1,505,388	-\$1,505,388
November			\$1,503,665	-\$1,503,665	-\$1,503,665
December			\$1,501,956	-\$1,501,956	-\$1,501,956
2013					
January			\$1,501,230	-\$1,501,230	-\$1,501,230
February			\$1,501,049	-\$1,501,049	-\$1,501,049
March			\$1,499,326	-\$1,499,326	-\$1,499,326
April			\$1,495,067	-\$1,495,067	-\$1,495,067
May			\$1,491,921	-\$1,491,921	-\$1,491,921
June			\$1,504,690	-\$1,504,690	-\$1,504,690

Tracking HUD Disbursement of HAP funds compared to PHA HAP Expenses.

In order to ensure sufficient cash is available to make HAP payments, track the actual and projected HAP expenditures against the actual and projected HUD disbursement of HAP funds.

Enter and Funds on Hand as of the end of the prior month in Column D and HUD HAP disbursements, actual and planned in Column E.

Actual and Planned Expenditures in Column F are imported from the Projection Analysis tab. The resulting Estimated End of Month Balance in Col. H factors in funds on hand, HUD Disbursements and HAP Expenditures. It should help the PHA better determine whether it needs to request front loading of disbursements from HUD.

IMPORTANT: The amount of funds disbursed by HUD is no longer based upon the amount of PHA funding, but rather is based on prior PHA spending. PHAs should not mistake disbursements as a spending limit. Spending limitations are a function of PHA Budget Authority and HAP Reserves (NRA).

The instructions on the page are self-explanatory. In the example above, the PHA was informed by HUD in June 2012 that it would disburse funds for July through September as shown above. Entering this into the spreadsheet, the PHA can see that in September, based on projected spending, it will have insufficient funds, as shown in the estimated End of Month Balance column, in this case **-\$14,112**. The PHA could then request HUD to advance additional funds, as described in Notice PIH 2011-67.

Other Tabs: Admin Fees

13

Projection Analysis

admin fee calculations

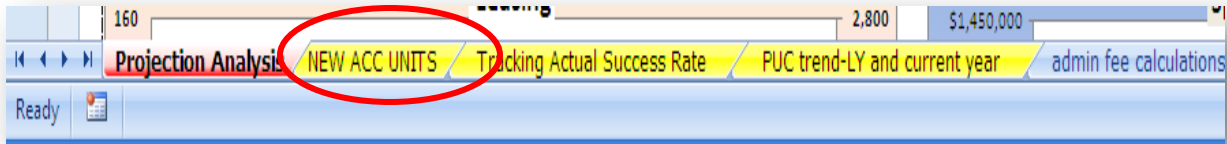
Tracking

Administration Fee Projections				2010 - Current Year HUD Admin Fee Schedule			
				HA Number	HA Name	Column A Fee Rate	Column B Fee Rate
2010				AK901	AK HSG FINANCE CORP	81.88	76.43
	UMLs	Per unit admin fee	Admin Fee Estimate	AL001	HSG AUTH OF BIRMINGHAM DISTRICT	57.34	53.52
1st 7200 UMLs	7,200	\$67.98	\$453,456.00	AL002	MOBILE HOUSING BOARD	58.25	54.37
over 7200 UMLs	2,262	\$62.98	\$142,479.74	AL004	HA ANNISTON	56.74	52.96
UMA cap	9,600			AL005	HA PHENIX CITY	56.74	52.96
total UMLs	9,462		\$595,935.74	AL006	H/A CITY OF MONTGOMERY	56.74	52.96
CY 2010 total			\$595,935.74	AL007	DOTHAN H/A	56.74	52.96
				AL008	HA SELMA	56.74	52.96
				AL010	FAIRFIELD ALABAMA H/A	57.34	53.52
				AL011	HA FORT PAYNE	56.74	52.96
				AL012	HA JASPER	56.74	52.96
				AL013	HA TARRANT	57.34	53.52
2011				AL014	HA GUNTERSVILLE	56.74	52.96
	UMLs	Per unit admin fee	Admin Fee Estimate	AL047	HA HUNTSVILLE	58.26	54.39
1st 7200 UMLs	7,200	\$67.98	\$453,456.00	AL048	HA DECATUR	56.74	52.96
over 7200 UMLs	2,296	\$62.98	\$144,630.45	AL049	HA GREATER GADSDEN	56.74	52.96
UMA Cap	9,600			AL050	HA AUBURN	56.74	52.96
Total UMLs	9,496		\$598,086.45	AL052	HA CULLMAN	56.74	52.96
CY 2011 total			\$598,086.45	AL053	HA HAMILTON	56.74	52.96

This tab shows the calculations that result in the estimated admin fee earnings displayed on the “Projection Analysis” tab. It also contains the admin fee “Column A” and “Column B” rates for every PHA. The “LookUp” function in the Projection and Analysis tab pulls the correct rates for the PHA whose number is entered into the PHA Number cell. The page also contains a link to the HUD website with the Fees.

<http://www.hud.gov/offices/pih/programs/hcv/adminfees2010.cfm>

Other Tabs: New ACC Unit Tab



Enter the new units awarded in the month effective, and the 12 months worth of subsidy awarded. This will be used to calculate the funding that will be distributed to the current year and next year. Late year awards may be effective in the next year and the spreadsheet permits entry for that situation. See the instructions above for additional detail.

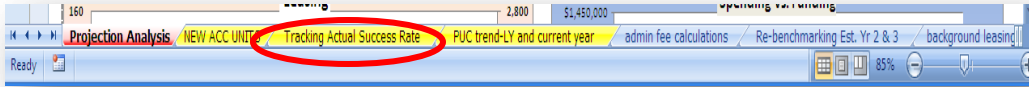
New ACC Unit Calculations

New units awarded in the current calendar year impact the projected funding in the following year in two ways:

1. Because allocations are funded for 12 months, it will span two calendar years (with the exception of a January 1 award), so the new funding estimate for the following year for that increment will only be for the balance of the following year not covered by the CY award. For example if a new increment is awarded on May 1, 2010, it will cover the 12 months - ending in April 30, 2011. The 2011 year funding for that increment will therefore only be for the remainder of 2011 - May thru December; and 2. A Lease-Up allowance period of three months is factored into the re-benchmarking period - adding in 3 months worth of full spending to compensate in the re-benchmarking period for spending that would otherwise be lost during the period the new vouchers are being issued and leased. Approved new increments may also be awarded in the CY *with effective dates in the following year*, and so the user should enter those in the appropriate month of the following year so that year's budget authority will reflect these funds and issuance scenarios in the following year can be supported by the anticipated funding. In addition, the impact on the tentative year three funding will also be impacted, just as the new units in the current year impact the following year.

2011 Average PUC		\$488.23					
		New Units 2011					
	Month Effective	New Units	Total Awarded Budget Authority (12 months)	Allowance for lease up in 2012 Re-benchmarking		Allowance for Remaining Months in 2012	
	2010 November			1 month	\$0		
	2010 December			2 months	\$0		
1	2011 January			3 months	\$0		na
2	2011 February			3 months	\$0	1	\$0
3	2011 March			3 months	\$0	2	\$0
4	2011 April			3 months	\$0	3	\$0
5	2011 May			3 months	\$0	4	\$0
6	2011 June	90	\$518,400	3 months	\$131,822	5	\$216,000
7	2011 July			3 months	\$0	6	\$0
8	2011 August			3 months	\$0	7	\$0
9	2011 September			3 months	\$0	8	\$0
10	2011 October			3 months	\$0	9	\$0
11	2011 November			2 months	\$0	10	\$0
12	2011 December			1 month	\$0	11	\$0
2012 Average PUC		\$493.68					
		\$518,400.00		Total	\$131,822	\$216,000	
		New Units 2012					
	Month Effective	New Units	Awarded Budget Authority	Allowance for lease up in 2013 Re-benchmarking		Allowance for Remaining Months in 2013	
1	2012 January			3 months	\$0		na
2	2012 February			3 months	\$0	1	\$0
3	2012 March			3 months	\$0	2	\$0
4	2012 April			3 months	\$0	3	\$0
5	2012 May			3 months	\$0	4	\$0
6	2012 June			3 months	\$0	5	\$0
7	2012 July			3 months	\$0	6	\$0
8	2012 August			3 months	\$0	7	\$0
9	2012 September			3 months	\$0	8	\$0
10	2012 October			3 months	\$0	9	\$0
11	2012 November			2 months	\$0	10	\$0
12	2012 December			1 month	\$0	11	\$0

Other Tabs: Tracking Actual Success Rate



This is an optional **spreadsheet** where the user can enter **actual** vouchers issued for each

month and the resulting vouchers leased from that group of issuances in subsequent months. For each issuance group, the spreadsheet will calculate the success rate, the % leased in 30, 60, 90, etc. days, and the average months from issuance to lease. There are more extensive instructions on the spreadsheet itself, as shown on the next page. These measures are presented cumulatively as well as monthly.

			2010					2011											
Issuance Month	# Issued Each Month	Eventual # leased	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
July 2010	60	48	8	30	10														
August 2010	30	21		4	15	1	1												
September 2010	40	29			6	18	2	3											
October 2010	20	15				7	7	3	2	1									
November 2010	80	52					12	20	15	3	2								
December 2010		0																	
January 2011		0																	
February 2011		0																	
March 2011		0																	
April 2011		0																	
May 2011		0																	
June 2011		0																	
July 2011		0																	
Total	230	165	8	34	31	21	22	26	17	4	2	0	0	0	0	0	0	0	0

Issuance Month	Success Rate	% Leased in 30 days	% Leased in 30 to 60 days	% Leased in 60 - 90 days	% Leased in 90 to 120 days	% Leased in 90 to 120 days	Avg Months
July 2010	80%	16.7%	62.5%	20.8%	0.0%	0.0%	2.0
August 2010	70%	19.0%	71.4%	4.8%	4.8%	0.0%	2.0
September 2010	73%	20.7%	62.1%	6.9%	10.3%	0.0%	2.1
October 2010	75%	13.3%	46.7%	20.0%	13.3%	6.7%	2.5
November 2010	65%	23.1%	38.5%	28.8%	5.8%	3.8%	2.3
December 2010	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
January 2011	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
February 2011	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
March 2011	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
April 2011	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
May 2011	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
June 2011	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
July 2011	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Cumulative	72%	19.4%	54.5%	18.8%	5.5%	1.8%	2.2

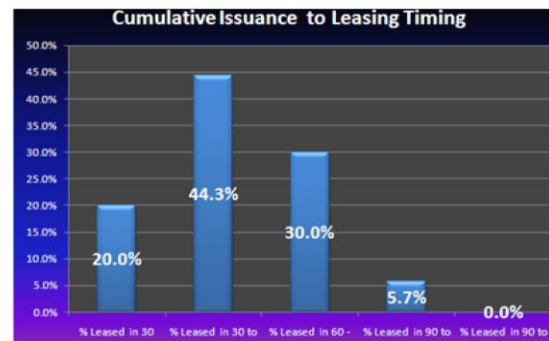
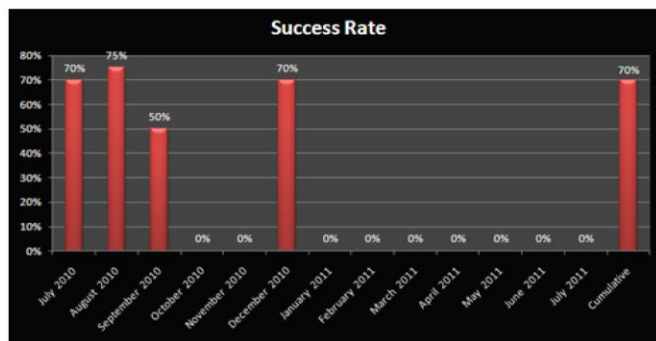
Actual Success Rate and Time to Lease Tracking

This optional spreadsheet offers the user an opportunity to track **actual** success rate and leasing timing that can be used to inform variables entered into the Projection Analysis tab. Because the period tracked is a five month period following each month's issuance, the 13 month period tracked begins with a period six months prior to the current year and ends with issuances in July of the current year, a period allowing all those issued vouchers to have reached fruition or cancellation.

To track success rate and the time from issuance to lease, each month's issuances should be tracked to determine the number eventually leased and the number of vouchers leased in each of the subsequent months - for that group of issuances. The success rate is not final until all the vouchers tracked from the month of issuance are either leased or terminated. In fact the data for that month's issuances should not be entered until all the data is entered for that group.

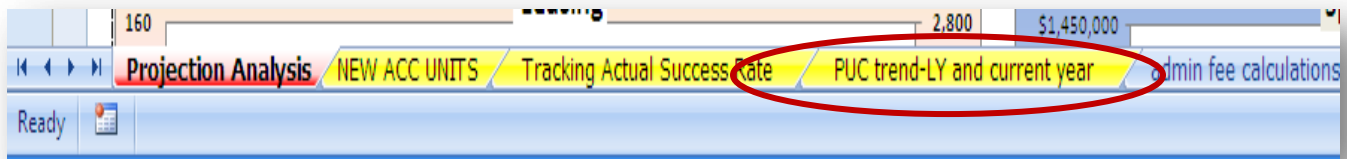
For example, the user enters 30 vouchers issued in January. For those vouchers, the user will eventually enter 5 leased in Feb., 14 in March and 3 in April, with the balance of vouchers being

Graphs present the success rates by month of issuance origin and then cumulatively, and the time from issuance to lease, as shown to the right.



The period of time runs from five months before the current year to the eighth month of the current year to capture only those months with issuance to leasing time periods for which all issued vouchers would have either been leased or terminated, in other words the process is complete and calculations can be made. In addition, one needs prior year experience to inform early current year choices for the variables, and beyond 8 months in the current year – issuances would not have run their course before the end of the year to be able to use the data. As elsewhere, the user enters data in the yellow – and orange cells: the number issued and then the number leased in the succeeding months. Everything else is calculated.

Other Tabs: PUC Trends: LY and Current Year



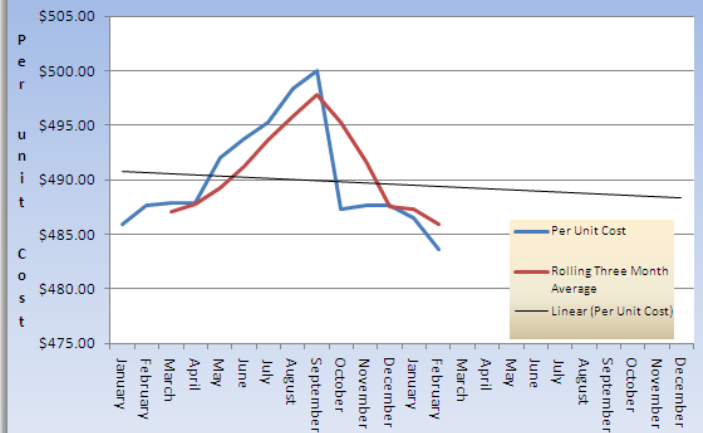
The monthly leasing, HAP expenses and PUC are automatically populated for the prior year's last Quarter, and with actual data entered during the year, from the Projection Analysis Tab. The user may also add data for the first three Quarters of the prior year to be better able to analyze historic trends. Data entry is provided for in the yellow cells. The year column is populated once the initial year is entered in the Projection Analysis Tab.

Year	Month	ACTUAL Leased Units	Actual HAP	Per Unit Cost	Monthly Change	Rolling Three Month Average
2009	January	2,550	\$1,239,000	\$485.88		
2009	February	2,543	\$1,240,000	\$487.61	0.36%	
2009	March	2,554	\$1,246,000	\$487.86	0.05%	\$487.12
2009	April	2,564	\$1,251,000	\$487.91	0.01%	\$487.79
2009	May	2,567	\$1,263,000	\$492.01	0.84%	\$489.26
2009	June	2,570	\$1,269,000	\$493.77	0.36%	\$491.23
2009	July	2,576	\$1,275,675	\$495.22	0.29%	\$493.67
2009	August	2,568	\$1,279,876	\$498.39	0.64%	\$495.79
2009	September	2,560	\$1,279,876	\$499.95	0.31%	\$497.85
2009	October	2,529	1,232,333	\$487.28	-2.53%	\$495.21
2009	November	2,524	1,230,897	\$487.68	0.08%	\$491.64
2009	December	2,520	1,228,789	\$487.61	-0.01%	\$487.52
2010	January	2,540	\$1,235,656	\$486.48	-0.23%	\$487.26
2010	February	2,552	\$1,234,234	\$483.63	-0.58%	\$485.91
2010	March			#N/A		#N/A
2010	April			#N/A		#N/A
2010	May			#N/A		#N/A
2010	June			#N/A		#N/A
2010	July			#N/A		#N/A
2010	August			#N/A		#N/A
2010	September			#N/A		#N/A
2010	October			#N/A		#N/A
2010	November			#N/A		#N/A
2010	December			#N/A		#N/A

Per Unit Cost Trend

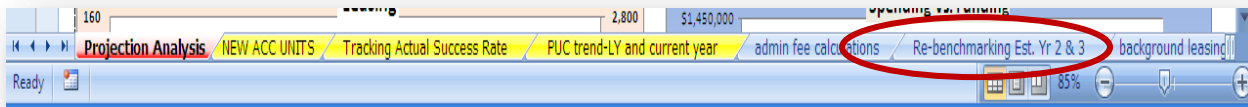
To track PUC trends from last year through current month, enter into yellow cells the Units leased and HAP expenditures for the prior year. The spreadsheet pulls current year information entered in the Projection AnalysisTab, including the last Quarter of the prior year. Resulting Ggraphs of the PUCs per month, a rolling three month average and regression trend line are generated to assist the user determine whether to override the most current actual PUC for projection purposes.

Per Unit Cost Prior and Current Year



Other Tabs: Re-benchmarking Est. Yr 2 & 3

This tab shows the underlying information used to calculate the subsequent year funding re-benchmarking, for Year 2 and 3. Two versions are calculated here, the CY version and the FFY version, including the yearend leasing set aside calculation for each.



Re-Benchmarking and Set Aside - Years 2 and 3 Estimate: CY and FFY Methods									
Year 2 <u>CY</u> Re-Benchmark Period Jan - Dec Current Year			Year End LeasingSet Aside		Year 2 <u>FFY</u> Re-Benchmark Period Jan - Dec Current Year			Year End LeasingSet Aside	
Months	UMLs	HAP Exp			Months	UMLs	HAP Exp		
January	2,540	\$1,235,656	CY average UML	2,540	October	2,529	\$1,232,333	FFY average UML	2,602
February	2,552	\$1,234,234	Higher of Year Qtr end avg or Dec	2,687	November	2,524	\$1,230,897	Higher of Year end Qtr avg or Dec	2,524
March	2,552	\$1,234,118	Lower of Year end high UML or UMA	2,687	December	2,520	\$1,228,789	Lower of Year end high UML or UMA	2,524
April	2,580	\$1,247,612			January	2,540	\$1,322,424		
May	2,676	\$1,294,424	Additional vouchers funded per month	46	February	2,552	\$1,324,879	Additional vouchers funded per month	0
June	2,687	\$1,319,543	Set Aside eligible	\$274,679.73	March	2,552	\$1,327,384	Set Aside eligible	\$0.00
July	2,695	\$1,323,395			April	2,580	\$1,331,039		
August	2,704	\$1,327,836	Set Aside Pro-ration	\$137,339.87	May	2,676	\$1,345,679	Set Aside Pro-ration	\$0.00
September	2,660	\$1,305,995			June	2,687	\$1,349,446		
October	2,671	\$1,311,254			July	2,695	\$1,353,185		
November	2,679	\$1,315,305			August	2,704	\$1,356,896		
December	2,687	\$1,319,188			September	2,660	\$1,360,580		
New Unit Allowance		\$131,822			New Unit Allowance		\$131,822		
Total	31,683	\$15,600,383			Total	31,220	\$15,895,353		
Eligibility with UMA Cap- funding limit	34,230	\$15,600,383			Eligibility with UMA Cap- funding limit	34,230	\$15,895,353		
Prorated per setting on projection Analysis Tab		\$15,288,375.17			Prorated per setting on rojection Analysis Tab		\$15,577,445.74		
Prorated per setting on projection Analysis Tab	\$492.39				Prorated per setting on rojection Analysis Tab	\$509.14			

Other Tabs: Background Leasing

17

Re-benchmarking Est. Yr 2 & 3

background leasing

Month	# issued Each Month	Eventual # leased	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov
Jan		0.0				0.0	0.0	0.0					
Feb		0.0				0.0	0.0	0.0					
Mar		0.0				0.0	0.0	0.0					
Apr		0.0					0.0	0.0			0.0		
May		0.0						0.0	0.0	0.0	0.0	0.0	
June	20.0	15.4							3.5	8.2	1.7	1.5	0.5
July	20.0	15.4								3.5	8.2	1.7	1.5

20 Vouchers issued in June

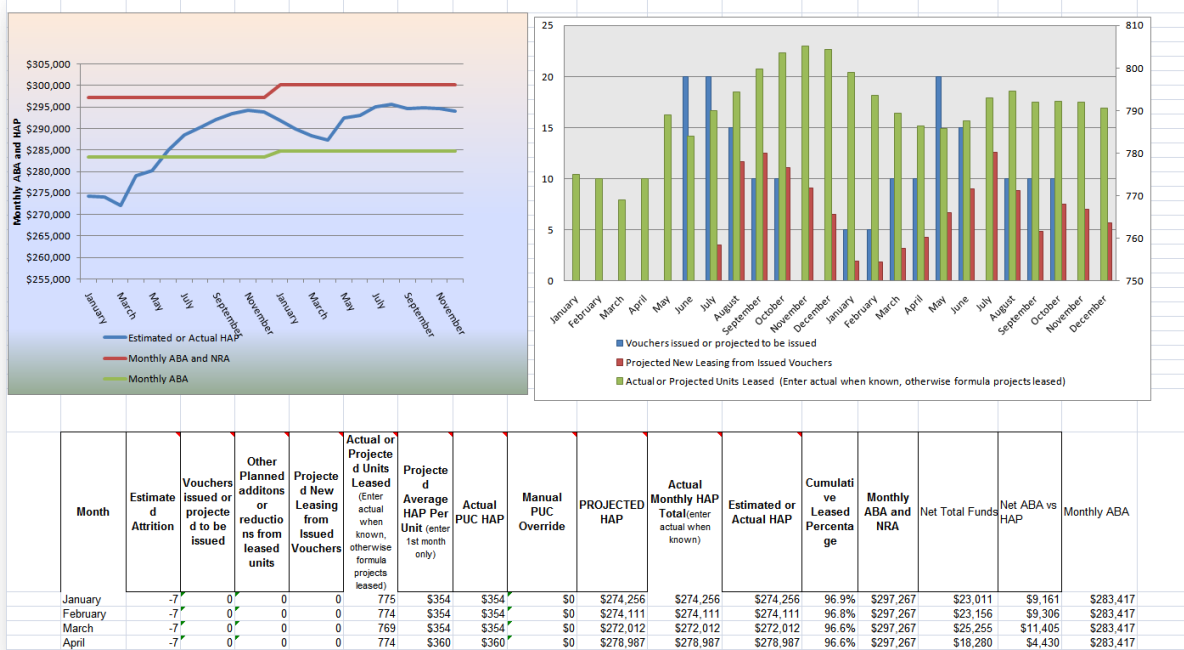
15 eventually leased per success rate

Distributed across months

This tab displays the underlying data and calculations that incorporate the key variables: success rate, and time from issuance to lease from the "Projection Analysis" tab, along with the number of Vouchers issued or planned to be issued. It then calculates the estimate of leased vouchers in succeeding months and returns that number to the "Projection Analysis" tab in the column "New Leasing from Issued Vouchers".

Other Tabs: Background Graphs

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This tab shows the source of data for the graphs and the graphs that are pulled into the “Projection Analysis” tab.

Key Steps - Initial Data Entry: Projection Analysis Tab

See Comment Flags in the spreadsheet for more detailed cell descriptions.

1. Enter PHA Number into **Cell F2**. This will result in the PHA name and admin fee rates being populated.
2. Enter Current Year in **Cell C6**.
3. Enter Units under ACC at January of the CY in **Cell C7**.
4. Enter in **Cell C8** Initial Funding level from the CY funding letter Enclosure A - line 19. If the PHA received a new allocation or allocations in the prior year, also add to this amount the amount of carry over funding, i.e. funds awards in the prior year but which are reserved for the remaining part of the 12 months that occurs in the current year. For example if the PHA received 50 new units effective 7/1/11 with 12 months of subsidy of \$360,000, the PHA would have 6 months of the funds reserved for payment in 2012.
5. If the PHA had an NRA Offset in the current year, enter it in **Cell C9**. This amount is identified in line 18 of enclosure A to the funding letter from HUD.
6. If funded for set Aside funding in the current year, enter in **Cell 10**.
7. Enter Net Restricted Assets (NRA) also known as HAP reserves as of 12/31 of the prior year in **Cell C14**.
8. Enter in Program Variables in Cells **K5, K7-K11, and M5**.
9. Enter best estimate of the next year's funding proration in **Cell H5**. Leaving it blank defaults to 100%.
10. Enter the Year 2 estimated Set aside proration in **Cell H6**.
11. Enter the Admin Fee Earnings Proration Percentage in **Cell H7**.
12. Optional - enter in NRA offset percentage in **Cell H9** if it is desired to see potential impact of an NRA offset in the next year (Year 2).
13. For any new ACC Units awarded in the year, enter data in the New ACC Unit Tab: the number of units in **Column D** in the month effective and the 12 months of subsidy awarded in **Column E**.
14. Enter in actual units leased and HAP expenses for appropriate months in cells **D21-E32** and **E35-E46**.
15. Enter in vouchers issued or planned to be issued - or issuance scenarios to be considered in **Cells F21 -32** and **Cells F35-46** for the next year.
16. To maximize the analytic usefulness of the PUC Trend tab, enter the units leased and HAP expenditures for the prior year - month by month: **Cells c1-C14 and D1-D14**.
17. To enter changes in leasing, up or down, other than from issuances or attrition, enter in **Column G**. This could be additions through absorbing portable vouchers, or leasing Project Based Vouchers. Reductions could come from ports absorbed by another PHA, or the payment through another source of funds.
18. To project future PUC levels different than the default use of the most recent month PUC, use the Manual PUC Override **Column H** to enter the desired level going forward effective with the month entered.
19. Test variables: success rate, etc., issuance scenarios, to determine key outcomes and to frame decisions.